Application No. 10/776,280 Reply to Office Action of July 21, 2005

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended) A turbomachine turbine vane comprising a multiplyperforated liner defining an annular cavity between an outside wall of the liner and an inside
 wall of the vane, an air admission opening for feeding the inside of the liner with cooling air
 and an air exhaust opening for exhausting a fraction of the cooling air from the vane, the liner
 being secured to the vane at a first end and being free at a second end to slide along an inside
 edge of the vane under the effects of relative thermal expansion between the liner and the
 inside wall of the vane, an annular gap between said free end of the liner and the inside edge
 of the vane defining a leakage zone for cooling air, wherein said inside edge comprises a
 recessgroove for generating a head loss in said leakage zone so as to reduce a flow rate of
 cooling air passing through said leakage zone, and said groove comprises a rectangular
 section groove.
- 2. (Currently Amended) The vane according to claim 1, wherein said recessgroove is made over all or part of the periphery of said inside edge.
- 3. (Currently Amended) The vane according to claim 2, wherein said recessgroove is circularly symmetrical.
 - 4. (Canceled)
- 5. (Currently Amended) <u>A turbomachine turbine vane comprising a multiply-</u> perforated liner defining an annular cavity between an outside wall of the liner and an inside

wall of the vane, an air admission opening for feeding the inside of the liner with cooling air and an air exhaust opening for exhausting a fraction of the cooling air from the vane, the liner being secured to the vane at a first end and being free at a second end to slide along an inside edge of the vane under the effects of relative thermal expansion between the liner and the inside wall of the vane, an annular gap between said free end of the liner and the inside edge of the vane defining a leakage zone for cooling air, wherein said inside edge comprises a groove for generating a head loss in said leakage zone so as to reduce a flow rate of cooling air passing through said leakage zone, and The vane according to claim 1, wherein said

- 6. (Previously Presented) The vane according to claim 5, wherein said corrugated section groove comprises at least one indentation.
- 7. (Previously Presented) A turbomachine turbine, comprising a plurality of cooled vanes according to claim 1.
 - 8. (Previously Presented) A turbine vane, comprising:

recess-groove comprises a corrugated section groove.

a liner defining an annular cavity between an outside wall of the liner and an inside wall of the vane, an end of the liner and the inside edge of the vane defining an air leakage passage;

an intake opening for feeding the inside of the liner with cooling air; an exhaust opening for removing a fraction of the cooling air from the vane; and Application No. 10/776,280

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a groove in the air leakage passage, the groove being disposed in the vane and being

configured to generate a head loss in the air leakage passage so as to reduce a flow rate of air

passing through the air leakage passage.

9. (Previously Presented) The vane according to claim 8, wherein the groove is made

over a peripheral portion of the inside edge.

10. (Previously Presented) The vane according to claim 8, wherein the groove is

made over an entire peripheral portion of the inside edge.

11. (Previously Presented) The vane according to claim 8, wherein the groove is a

circular groove disposed along an azimuthal direction of the end of the liner.

12. (Previously Presented) The vane according to claim 8, wherein the groove is a

rectangular groove.

13. (Previously Presented) The vane according to claim 8, wherein the groove is a

groove with a corrugated cross section.

14. (Previously Presented) The vane according to claim 13, wherein the corrugated

cross section comprises at least one indentation.

15. (Currently Amended) The vane according to claim 13, wherein the corrugated

cross section comprises at least-three indentations.

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16. (Currently Amended) The vane according to claim 15, wherein a depth of each indentation is approximately 0.6 mm and a radius of curvature of each indentation is approximately 0.2 mm.

17. (Currently Amended) The vane according to claim 16, wherein a total width of the groove is approximately 2 mm.

18. (Previously Presented) The vane according to claim 8, wherein the groove is annular.

19. (Previously Presented) The vane according to claim 8, wherein the groove is elliptical.

20. (Previously Presented) A turbomachine turbine, comprising: a plurality of vanes according to claim 8.